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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,998	03/23/2001	Hirofumi Taketsu	2204-002012	1204

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EXAMINER	
BLOUNT, STEVEN	
ART UNIT	**PAPER NUMBER**
2661	18

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/787,998	TAKETSU ET AL.	
	Examiner	Art Unit	
	Steven Blount	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 5 - 7, 9 - 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 5 - 7, 9 - 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 5 – 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art (hereinafter referred to as AAPA) in view of U.S. patent 6,009,913 to Kojima and U.S. patent 5,614,263 to Ogawa et al.

AAPA teaches, in the section labeled "Prior Art", page 2 lines 17 – page 3, lines 1 – 3 of the specification, that, "an Al-coated steel sheet to which an organic resin film is applied is proposed as material for a fuel tank in order to eliminate the above mentioned problems." AAPA does not however teach a coating capable of protecting the fuel tank from scratches which occur during pressing wherein the coating has an acid value of 40 – 90, or wherein 1 – 50% hydrogen atoms in the carboxyl groups being substituted with an alkali metal.

Kojima teaches a resin coating providing antiscratching properties with an acid value of 10 – 160 (col 6 line 19) as described in detail in the previous Office action, paper #16. It is noted that in the previous Office action, the examiner pointed out that Kojima teaches that the resin coating is "soluble in an alkali aqueous solution" (col 6, lines 3 – 4 and col 14, paragraph 2).

Ogawa et al teach, in a "chemically adsorbed film (that) contains hydrophilic groups at outermost surface" (col 3 lines 2 – 3), substituting the hydrogen atom in

COOH with an alkali metal. See col 3 lines 10+. (The examiner notes that while Ogawa does not explicitly teach replacing 1 – 50% of the H atoms with the alkali metal, since this encompasses such a large range of substitution values – up to and including 50% (ie, it would include 5%, 20%, 35% 50%, etc.) – it would be well within the ordinary skill in the art to choose a substitution value which lies within this wide range).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the fuel tank of AAPA with a protection coating with an acid value of 40 – 90 in light of the teachings of Kojima to protect the fuel tank during its formation and provide a means for removing it in an alkali aqueous media once the process is finished, and to have further substituted 1 – 50% of the H atoms in AAPA/Kojima with an alkali metal, in light of the teachings of Ogawa, in order to provide a means for making the resin of Kojima, after being applied to the fuel tank of AAPA, more soluble in the alkali aqueous media, and hence easier to remove after the press forming operation.

With regard to claims 5 – 7, see the rejection in paper number 16, where each of these claimed features in AAPA and Kojima is discussed.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being obvious over applicants admitted prior art (AAPA) in view of U.S. patent 6,009,913 to Kojima et al and U.S. patent 5,614,263 to Ogawa et al as applied above, and further in view of Japanese patent 410265967 to Teruaki et al.

AAPA/Kojima/Ogawa teach the invention as described above, but do not teach mixing the resin film with 1 – 30% mass % powdery silica. The use of silica is taught in

Teruaki (2 – 13%), wherein a powdered form of it is commonly known. Further, the amount used in Teruaki is similar to that claimed. It would have been obvious to one of Ordinary skill in the art at the time of the invention to have provided the resin film of AAPA/Kojima with a powdery silica (1-30%) in light of the teachings of Teruaki et al in order to make the resin evenly applicable to the surface.

4. Applicant's arguments filed 2/9/04 have been fully considered but they are not persuasive. Most of the arguments are deemed moot in view of the newly applied reference. The examiner notes that, with respect to Teruaki teaching Si instead of silica, these are obvious equivalents of each other.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

SB

4/5/04

DOUGLAS OLMS
SUPERVISORY PATENT EXAMINER
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